



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/552,265

08/11/2006

Marco Angelini

U 015960-5

6496

140

7590

02/20/2009

LADAS & PARRY LLP
26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER

MAKIYA, DAVID J

ART UNIT

PAPER NUMBER

2885

MAIL DATE

DELIVERY MODE

02/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,265	Applicant(s) ANGELINI ET AL.	
	Examiner David J. Makiya	Art Unit 2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7-9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendment filed 10/20/2008 has been entered.

Claim Objections

Claims 3-5, 7-9, and 11-15 are objected to because of the following informalities: In the claims, the language "characterized in that" and "characterized by" does not conform to the U.S. standard practice. It is suggested that the "characterized in that" language should be changed to --wherein-- and the "characterized by comprising" should be changed to --comprising-- as detailed below.

Claims 3, 5, and 7 are objected to because they are dependent on cancelled claims. The claims will all be interpreted as being dependent on claim 1.

Claims 5, 8, and 9 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim language in claims 5, 8, and 9 has already been amended into claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2885

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lilge et al. (US Patent 6,154,282) in view of Sander (US 2003/0007365).

With respect to claims 1, 8, and 9, Lilge et al. teaches a lighting assembly for a luminescence analysis apparatus, in particular a fluorescence microscope, comprising a housing 10 connectable to a base structure of the apparatus and housing at least one light source 14; the lighting assembly comprising a lighting unit 12 comprising an LED 50 and an optical unit 18; the integrated lighting unit comprising a LED 50 defining the light source, and an optical collimating element 18 associated with the LED to convey the light generated by the LED in a substantially parallel beam of light rays (Figure 1; Column 4, Lines 1-5); and an excitation filter (Band Pass Filter; Column 4, Lines 14-18) located opposite the optical element to select a predetermined emission band of the LED (Column 4, Lines 14-18); each optical unit comprising a hollow supporting body 20 housing a dichroic plate 24 substantially facing the optical element and tilted with respect to the beam from the optical element (Figure 1); and an emission filter 30 carried by the supporting body (Figure 1), the optical unit being located downstream from the excitation filter (Figure 1).

However, Lilge et al. fails to teach the lighting assembly comprising two or more interchangeable lighting units and two or more interchangeable optical units with selecting means.

Sander teaches a lighting assembly (Figure 4) comprising two or more interchangeable lighting units (40, 41) comprising light sources (Paragraph 35) having respective different emission bands (Paragraph 12) and two or more interchangeable optical units (5a, 5b, 5c, 21a,

Art Unit: 2885

21b), and selecting means 26 for selectively associating a lighting unit with an optical unit (Paragraph 35), and an optical collimating element 9 associated with the LED to convey the light generated by the LED in a substantially parallel beam of light rays (Paragraph 33); an excitation filter (5a, 5b, 5c) located opposite the optical element (Figure 4) to select a predetermined emission band of the light source (Paragraph 35); wherein the selecting means comprises a movable first structure 22 supporting the lighting units (Paragraph 35); and a movable second structure 23 supporting the optical units (Paragraph 35); the structures being movable with respect to a housing to selectively position a lighting unit and an optical unit substantially facing each other (Figure 4; Paragraph 35).

It would have been obvious and advantageous to one of ordinary skill in the art at the time of the invention to modify and reconstruct the lighting assembly of Lilge et al. by replacing the lighting assembly with the interchangeable lighting units and optical units from the teachings of Sander because “interchangeable lamps allow a burned-out lamp to be replaced with a spare lamp, so as to minimize the interruption time in the event of a lamp failure... [and] the filter itself is movable and can readily be replaced with other filters” (Sander; Paragraph 8) and “two light sources each having a beam path results in a number of improvements...[such as] one common assemblage, for example in the stand of a microscope, thereby simplifying practical handling...[and] simplifying practical handling” (Sander; Paragraph 30).

With respect to claim 3, Lilge et al. teaches the lighting assembly wherein the excitation filter is a band-pass filter (Column 4, Lines 14-18).

With respect to claim 4, Lilge et al. teaches the lighting assembly wherein the excitation filter permits the passage of light of a wavelength within a band superimposed on the emission band of the LED and located about a peak of the LED emission curve (Column 4, Lines 14-18).

With respect to claim 5, Lilge et al. teaches the lighting assembly further comprising an optical unit 20 associated with the lighting unit and located downstream from the excitation filter inside the housing; the optical unit comprising a dichroic plate 24 substantially facing the optical element and tilted with respect to the beam from the optical element (Figure 1).

With respect to claim 7, Lilge et al. teaches the lighting assembly wherein the optical unit comprises an emission filter 30 carried by the supporting body and associated with a first exit opening (Direction of arrow 28).

With respect to claim 11, Lilge et al. teaches the lighting assembly wherein the optical element is located in close proximity to the LED, and is connected integrally to the LED to define a preassembled module (Figure 1).

With respect to claim 12, Lilge et al. teaches the lighting assembly wherein the optical element (18, 24) is a complex-surface catadioptric collimator (Column 4, Lines 1-4).

With respect to claim 14, Lilge et al. teaches a luminescence analysis apparatus, in particular for fluorescence microscopy, comprising a lighting assembly (Column 4, Lines 35-47).

With respect to claim 15, Lilge et al. teaches the lighting assembly further comprising a sample support (Figure 1), and optical means 30 for directing the light generated by the lighting assembly onto a luminescent sample 32 on the support.

With respect to claim 13, Lilge et al. in view of Sander teaches the lighting assembly as described above, but fails to teach releasable means for attaching the housing to the base structure.

The applicant is advised that it has been held by the courts that the mere fact that a given structure is integral does not preclude its consisting of various elements, and that constructing a formerly integral structure in various portions involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 178. In this case, it would have been obvious to modify and reconstruct the device such that the housing is separate from the base structure using releasable means because being separate allows the user to easily and quickly access the base for examining different subjects.

Response to Arguments

Applicant's arguments filed 10/20/2008 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that "Sander teaches to use interchangeable units in view of components replacement," the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for

patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that modifying Lilge by adding the features of Sander, the applicant is referred to Paragraph 30 of Sander teaches that the device has "two types of illumination of the specimen field can be integrated into one common assemblage, for example in the stand of a microscope, thereby simplifying practical handling." Furthermore, Paragraph 35 states "Light source 1 and filter 5 (in FIG. 1) may be replaced with interchangeable light sources 40, 41 and interchangeable filters 5a, 5b, 5c (in FIG. 4)." Therefore, the reference teaches replacing a single light source and filter, such as that in the Lilge et al. reference, with the lighting assembly as found in Figure 4 of Sander for a plurality of improvements (Sander; Paragraph 30). Therefore, the combination of references meets the limitations as claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fox (US Patent 7,280,726), Scaduto (US Patent 6,429,936), and Yoneda et al. (US 2003/0147254) teach lighting assemblies with interchangeable optical or lighting units. Sander (US 2005/0047172) teaches a lighting assembly with multiple different emission bands.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

Art Unit: 2885

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Makiya whose telephone number is (571) 272-2273. The examiner can normally be reached on Monday-Friday 7:30am - 4:00pm (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DJM/
02/13/2009

/Jong-Suk (James) Lee/
Supervisory Patent Examiner
Art Unit 2885